

Towards sustainable astronomy in the Netherlands

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The current climate crisis has led to UN and EU regulations to reduce greenhouse gas emissions by 55% in 2030. Astronomers should lead this effort by example, as they are aware of the lack of a Planet B to live on.

In the Netherlands, the Rvda installed a working group to monitor and improve the sustainability of Dutch astronomy, including outreach & communication on this topic. Our kickoff study [1] showed that in 2019, airplane travel dominated the CO₂ footprint of astronomy research, with uncertain contributions from observatories and supercomputing. Meeting the goals of the Paris agreement requires flying 2-4x less than before the pandemic.

This talk presents an update of our activities, including an estimate of the LOFAR footprint, a plan to measure the computing footprint, and a survey of effective and acceptable ways to reduce CO₂ emission due to airplane travel.

[1] Van der Tak et al 2021, Nature Astronomy 5, 1195

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